paragraph_id	text	seg_all	req_type	req_cat	s_ver_met hod	s_ver_statu	a_ver_met hod	a_ver_s tatus	req_k
DADS1472#	Each DADS shall contain the	SDPS	functional	mission	demo	un-verified	test	un-	4489
A	appropriate capacity to respond to	SD1 S	Tunenona	critical	demo	an vermea	demo	verified	1105
1.1	contingencies, scheduling problems,							Vermied	
	and peak loads								
DADS1640#	The DADS shall support the	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4566
A	number of files derivable from			essential			demo	verified	
	Appendix C, with the ability to								
	expand to match growth								
DADS1806#	Each DADS shall provide the	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4641
A	capability of retrieving any data			essential			<del>demo</del>	verified	
D 1 D 221 10 11	granule stored in the archives.	2222		<u> </u>		1.01			1 1 1 6
DADS2160#	Each DADS shall maintain a	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4448
A	list/schedule of standing orders.	appa	C .: 1	essential	1	· C. 1	demo	verified	4.450
DADS2170#	Each DADS shall maintain a	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4450
A	list/schedule of retrospective orders.	appa	C .: 1	essential	1	· C. 1	demo	verified	4.450
DADS2190#	Each DADS shall maintain a list of	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4453
A	products which could not be			essential			demo	verified	
	delivered electronically (e.g.,								
DADS2370#	workstation off-line) Each DADS shall send to the user,	SDPS	functional	mission	demo	un-verified	test	un-	4485
A Α	at a minimum, the following:	ט ועט	Tunctional	essential	demo	un-vermeu	<del>demo</del>	verified	4403
A	a. L0-L4			essential			demo	vermeu	
	b. Special products (L1-L4)								
	c. Metadata								
	d. Ancillary data								
	e. Calibration data								
	f. Correlative data								
	g. Documents								
	h. Algorithms								
	i. Algoriums i. Planning and scheduling								
D 4 D C 2 4 1 0 11		appa	C .: 1		1	· C. 1			4.400
DADS2410#	Exemplads shall distribute data	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4488
A	from the archive in response to			essential			demo	verified	
	receipt of a product order from the								
D + D 62 126 "	IMS.	ann.		ļ	ļ.,	101 -			4.10.5
DADS2430#	Each DADS shall be capable of	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	4493

<del></del>									
A	distributing any data granule stored in the archive.			essential			demo	verified	
DADS2460# A	Each DADS shall have a manual override function capable of altering the priority of a distribution request.	SDPS	functional	mission essential	demo	un-verified	test demo	un- verified	4503
DADS2480# A	Each DADS shall distribute data based upon entries in the standing and the retrospective order distribution list.	SDPS	functional	mission essential	demo	un-verified	test demo	un- verified	4504
DADS2530# A	The DADS shall be capable of distributing by physical media to meet user demand.	SDPS	functional	mission essential	demo	un-verified	test demo	un- verified	4512
DADS2778# A	Each DADS shall be capable of receiving and archiving three days' worth of data (see Appendix C) in any given day.	SDPS	performance	mission essential	demo	un-verified	test demo	un- verified	4519
DADS2900# A	Each DADS shall provide archival capacity for current volume requirements plus one year.  Volume requirements are specified in Appendix C.	SDPS	performance	mission essential	demo	un-verified	analysis demo	un- verified	4521
DADS3040# A	At each DADS backup media shall be removable from the DADS site (e.g., for safe off-site storage).	SDPS	performance	mission essential	inspection	un-verified	test inspection	un- verified	4527
DADS3055# A	At each DADS all backup media shall be capable of being mounted automatically where appropriate, with the provision for manual failover.	SDPS	performance	mission essential	demo	un-verified	test demo	un- verified	4528
DADS3110# A	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.	SDPS	performance	mission essential	demo	un-verified	test demo	un- verified	4534
DADS3120# A	Each DADS shall distribute product QA data produced at the collocated PGS within 1 hour from the time it	SDPS	performance	mission fulfillment	demo	un-verified	test demo	un- verified	4536

<u>ruge r</u>	in mander	I		1					
D + D G 0 1 0 5 11	is ready.	appa			,				1.500
DADS3125#	Each DADS shall make archive	SDPS	performance	mission	demo	un-verified	<u>test</u>	un-	4538
A	data, associated with a pre-defined			fulfillment			demo	verified	
	ECS standard format, that is								
	requested for communications								
	network delivery, available to the								
	network in that ECS standard								
	format within an average of 2								
	minutes after the receipt of a request for that data.								
DADS3126#	Each DADS shall make archive	SDPS			1	:C-1	44		4539
		SDPS	performance	mission	demo	un-verified	test demo	un- verified	4535
A	data, associated with a pre-defined ECS standard format, that is			fulfillment			<del>demo</del>	vermed	
	requested for communications								
	network delivery available to the								
	network in a different ECS standard								
	format within an average of 5								
	minutes after the request for that								
	data.								
DADS3135#	The DADS shall have the capability	SDPS	performance	mission	demo	un-verified	test	un-	4541
A	to support the transaction rate as	2212	Periormano	essential			demo	verified	.0.1
	specified in Table 7-4.								
DADS3150#	The DADS shall be developed with	SDPS	functional	mission	demo	un-verified	inspection	un-	4545
A	configuration-controlled application			fulfillment			demo	verified	
	programming interfaces (APIs) that								
	will be capable of supporting								
	development of DAAC-unique data								
	distribution services operated								
	independently of the delivered ECS								
	DADS services.								
DADS3160#	The DADS shall be developed with	SDPS	functional	mission	demo	un-verified	inspection	un-	5398
A	configuration-controlled application			fulfillment			demo	verified	
	programming interfaces (APIs) that								
	will be capable of supporting								
	development of an operator								
	interface that may bypass the								

<del>- 110</del>									
	delivered DADS operator interface.								
EOC-	The EOC shall support instrument	FOS	functional	mission	demo	un-verified	<u>analysis</u>	un-	4617
8285#A	integration activities associated with			critical			<del>demo</del>	verified	
	the spacecraft prior to launch.						_		
EOSD0020#	ECS shall use and support the	FOS	operational	mission	test	un-verified	<u>demo</u>	un-	6314
A	EDOS/EBnet interface to obtain the	SDPS		critical			test	verified	
	data capture, data archival, and data distribution services needed to	CSMS							
	achieve full end-to-end ECS								
	functionality.								
EOSD0510#	ECS shall be capable of being tested	SDPS	functional	mission	test	un-verified	analysis	un-	6309
A	during all phases of its development		Tomorrona	essential			test	verified	0207
	and flight operations.								
EOSD0560#	ECS benchmark tests and test data	SDPS	procedural	mission	test	un-verified	<u>demo</u>	un-	6210
A	sets shall be defined for system	CSMS		essential			test	verified	
	verification and data quality								
	evaluation.								
EOSD0630#	ECS shall be capable of	FOS	functional	mission	demo	un-verified	<u>analysis</u>	un-	4795
A	simultaneously supporting the	SDPS		essential			demo	verified	
	Independent Verification and Validation (IV&V) activities and	CSMS							
	ECS development activities, both								
	before and after flight operations								
	begin.								
EOSD0720#	Each ECS element shall be able to	SDPS	functional	mission	test	un-verified	demo	un-	6213
A	validate at any time during the life-	CSMS		critical			test	verified	
	time of the ECS that the ECS								
	element primary functional								
	performance is consistent with pre-								
	defined operational benchmark								
EOSD0760#	tests.  Each ECS element shall support	FOS	functional	mission	demo	un-verified	analysis	un-	4806
A A	end-to-end EOS system testing and	CSMS	Tuncuonai	critical	dellio	un-vermed	<u>analysis</u> <del>demo</del>	un- verified	4000
Α	fault isolation.	COMIO		Cilicai			acmo	vernica	
EOSD0800#	Each ECS element shall be capable	FOS	functional	mission	demo	un-verified	<u>analysis</u>	un-	4808
A	of supporting end-to-end test and	SDPS	1	critical	1	1	demo	verified	

14500	verification activities of the EOS	CSMS							
	program including during the pre-								
	launch, spacecraft verification, and								
	instrument verification phases.								
EOSD1705#	ECS shall support interfaces to	SDPS	procedural	mission	analysis	un-verified	demo	un-	4833
A	DAAC Unique components.	CSMS		fulfillment			analysis	verified	
EOSD1710#	ECS elements shall exchange with	SDPS	interface	mission	demo	un-verified	test	un-	4834
A	ADCs/ODCs, such as NOAA and	CSMS		fulfillment			demo	verified	
	other data processing and archiving								
	facilities, information including the								
	following:								
	a. Directories								
	b. Product Orders								
	c. Order Status								
	d. Science Data								
	e. Management Data								
EOSD1720#	ECS elements shall receive from	SDPS	interface	mission	demo	un-verified	<u>test</u>	un-	4835
A	the ECS user community the	CSMS		essential			<del>demo</del>	verified	
	following types of								
	data requests at a minimum:								
	b. Data Distribution Requests								
	c. Reprocessing Requests								
EOSD1990#	The ECS system and elements shall	FOS	security	mission	analysis	un-verified	<u>inspection</u>	un-	4840
A	employ security measures and	SDPS		essential			analysis	verified	
	techniques for all applicable security	CSMS							
	disciplines which are identified in								
	the preceding								
	documents. These documents shall								
	provide the basis for the ECS								
	security policy.	7001		<u> </u>		121 1			700
EOSD3200#	A minimum of one backup which	FOS	security	mission	inspection	un-verified	<u>test</u>	un-	5086
A	is maintained in a separate physical	SDPS		critical			inspection	verified	
	location (i.e., different building)	CSMS							
	shall be maintained for ECS								
	software and key data items								
	(including security audit trails and						<u> </u>		

	logs).								
EOSD3500# A	The ECS RMA Program shall adhere to GSFC 420-05-03, Performance Assurance Requirements for the EOSDIS.	FOS   SDPS   CSMS	procedural   RMA	mission essential	demo	un-verified	inspection demo	un- verified	5583
EOSD3510# A	Reliability predictions shall be calculated in accordance with the parts count analysis method, Appendix A, of MIL-HDBK-217F, Reliability Prediction of Electronic Equipment.	FOS   SDPS   CSMS	procedural   RMA	mission fulfillment	test	un-verified	inspection test	un- verified	5582
EOSD3600# A	Maintainability shall be predicted in accordance with MIL-HDBK-472, Maintainability Prediction, Procedure IV.	FOS   SDPS   CSMS	procedural   RMA	mission fulfillment	test	un-verified	inspection test	un- verified	5584
EOSD3620# A	ECS shall predict and periodically assess maintainability by measuring the actual MDT and comparing to the required MDT.	CSMS	RMA	mission fulfillment	test	un-verified	analysis test	un- verified	510€
EOSD3625# A	For ECS functions with a backup capability, ECS shall use switchover time to the backup capability in measuring maintainability, rather than down time, when the component goes down.	FOS   SDPS   CSMS	procedural   RMA	mission fulfillment	test	un-verified	inspection test	un- verified	5587
EOSD4100# A	The ECS segments, elements, and components shall include the online (operational mode) and off-line (test mode) fault detection and isolation capabilities required to achieve the specified operational availability requirements.	FOS   SDPS   CSMS	RMA	mission essential	test	un-verified	demo test	un- verified	5169
EOSD5030# A	ECS shall enable the addition of information search and retrieval services, e.g. WAIS, WWW.	SDPS   CSMS	evolvable	mission fulfillment	demo	un-verified	test demo	un- verified	5177

EOSD5250#	ECS shall enable access to	SDPS	evolvable	mission	analysis	un-verified	<u>inspection</u>	un-	5185
A	configuration controlled applications	CSMS		fulfillment			analysis	verified	
	programming								
	interfaces that permit development								
	of DAAC-unique value added								
	services and products where								
	DAAC-unique value added services								
	may consist of one or more of the								
	following types of developments:								
	a. Visualization utilities and								
	products								
	b. Data sets and inter-data set								
	usability utilities and products								
	c. Data analysis utilities								
	d. Special subsetting capabilities								
	(e.g. dynamic)								
	e. On-line analysis functions								
	f. New search and access techniques								
	g. Data acquisition planning and								
	utilities								
	h. Experimental QA techniques								
	i. Non-digital data utilities and								
	products								
	j. System Management Functions	~~							
ESN-	The ESN shall enable researchers	CSMS	functional	mission	analysis	un-verified	<u>test</u>	un-	5189
0003#A	on existing networks (TCP/IP and			essential			analysis	verified	
	GOSIP) to gain access to data and								
	ECS services in a transparent								
	manner to the underlying								
	differences between the networks.	~~~							
ESN-	ESN shall interface with NSI to	CSMS	functional	mission	analysis	un-verified	<u>test</u>	un-	5194
0006#A	reach all external non-ECS			essential			analysis	verified	
	network-attached facilities and								
701	science users.								
ESN-	The ESN shall interoperate with	CSMS	functional	mission	test	un-verified	<u>analysis</u>	un-	5233
1180#A	NSI to provide user access to ECS.			critical			test	verified	

ESN-	The ESN shall provide ISO/OSI	CSMS	functional	mission	analysis	un-verified	<u>test</u>	un-	5239
1330#A	data communications protocols and			essential			<del>analysis</del>	verified	
	services specified in the GOSIP								
	(see Figure 8-3) to external								
	interfaces as required by the IRDs.								
ESN-	The ESN shall provide support for	CSMS	functional	mission	analysis	un-verified	<u>test</u>	un-	5241
1340#A	TCP/IP communications protocols			critical			<del>analysis</del>	verified	
	and services to external interfaces as								
	required by the IRDs.								
IMS-0100#A	1 1 '	SDPS	interface	mission	inspection	un-verified	<u>demo</u>	un-	5472
	minimum:			essential			inspection	verified	
	a. Interactive sessions								
	b. Non-interactive remote sessions								
	c. Client-server interface								
IMS-0120#A	The IMS shall provide, dependent	SDPS	functional	mission	inspection	un-verified	<u>demo</u>	un-	5474
	upon the user's display device			essential	_	TBD	inspection	<u>verified</u>	
	capabilities, a user-friendly interface						_	<del>TBD</del>	
	with the following								
	features at a minimum:								
	a. Multiple window display								
	b. Buttons and pull down menus								
	c. Valid lists for all variables								
	d. An information base of								
	associations between variables (e.g.,								
	between								
	instruments and geophysical								
	parameters)								
	f. Context-sensitive help								
	g. Minimal and consistent use of								
	non-standard keys								
	h. Random movement through								
	fields								
	j. Standardized use of commands								
	and terminology across screens								
	k. Self-explanatory, meaningful								
	error messages								

<u>rage 10</u>									
	1. Automatic acronym expansion,								
	which can be enabled and disabled								
	interactively								
	m. Availability of a menu tree								
	diagram								
	n. Command language								
IMS-0150#A	The IMS shall supply a uniform	SDPS	security	mission	demo	un-verified	<u>analysis</u>	un-	5477
	user interface for access to the			fulfillment			demo	verified	
	following at a minimum:								
	a. Heterogeneous data sets								
	b. Communications networks								
	c. Data bases that are geographically								
	dispersed								
	d. Multi-disciplined directories and								
	inventories								
IMS-0170#A	The IMS user interface shall be	SDPS	evolvable	mission	analysis	un-verified	<u>demo</u>	un-	5478
	designed so that restructuring of the			fulfillment			<del>analysis</del>	verified	
	IMS data bases shall not result in								
	the need for changes to the IMS								
	interface.								
IMS-0350#A	The IMS shall provide the capability	SDPS	security	mission	inspection	un-verified	<u>demo</u>	un-	5492
	for authorized personnel to add,			critical			inspection	verified	
	delete, or modify ECS metadata								
	entries, individually or in groups.								
IMS-0510#A	The IMS shall provide tools for	SDPS	interface	mission	demo	un-verified	inspection	un-	5509
	research planning and data search,			critical		TBD	demo	<u>verified</u>	
	to include at a minimum:							TBD	
	a. Data acquisition schedules and								
	plans								
	b. The capability to map specified								
	geophysical parameters to the								
	appropriate instrument and/or								
	Standard Product								
	c. Descriptive information on								
	instruments and geophysical								
	parameters available in Standard								

<u>1 450 11</u>									
	Products								
	d. Climatology information f. Geographic reference aids								
	g. Spacecraft location projections.								
IMS-0665#A	The IMS shall provide	SDPS	functional	mission	demo	un-verified	test	un-	5525
11415 00051171	informational messages to indicate	SDIS	Tunctional	essential	demo	un vermea	demo	verified	3323
	that a query is being executed, and			Cosciliai			demo	vermea	
	shall provide the capability for the								
	user to abort any time-intensive								
	operations.								
IMS-0690#A	The IMS shall provide the capability	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	5528
	to visualize pre-order data products			essential			demo	verified	
	and metadata (e.g. coverage maps,								
	summary data) to facilitate the data								
	selection and								
	ordering process.								
IMS-0740#A	The IMS shall provide the capability	SDPS	functional	mission	demo	un-verified	<u>test</u>	un-	5529
	for users to generate and update			essential			demo	verified	
	requests for one-time orders or								
	standing orders for the DADS to								
	distribute DADS archive holdings								
	to include, at a minimum, Standard Products, Standard Product								
	software, spacecraft housekeeping								
	and ancillary data.								
IMS-1080#A	The IMS shall accept requests for	SDPS	functional	mission	demo	un-verified	test	un-	5548
11115-1000#71	acquisition of data to be processed	SDIS	Tunctional	critical	demo	un-vermeu	demo	verified	JJ+C
	one time or as standing orders.			Critical			demo	vermea	
IMS-1645#A	The IMS shall accept from the users	SDPS	interface	mission	demo	un-verified	test	un-	5564
11/18/10/10/11	and output to the SMC, user	5515		fulfillment		dir verifica	demo	verified	2201
	feedback information, which shall								
	contain the following at a								
	minimum:								
	a. Product data quality assessment								
	b. Schedule performance								
	assessment								

<u>1 age 12</u>	c. Evaluation of quality of ECS service								
IMS-1665#A	he IMS shall provide to the SMC, IMS services usage by each user (to include at a minimum user name, IMS service identification, date/time stamp, time expended, facilities used) for later reporting and determination of access patterns.	SDPS	interface	mission fulfillment	test	un-verified	demo test	un- verified	5568
IMS-1765#A	The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users:  a. Addition of metadata fields that are unique to the data maintained at a specific DAAC  b. Addition of documents for use as guide metadata for DAAC-specific data products  c. Development of DAAC-specific data acquisition request utilities  d. Support of data visualization utilities for DAAC-specific products  e. Support of DAAC-specific data analysis utilities  f. Development of DAAC-unique metadata search and access services that will operate independent of the	SDPS	functional	mission essential	test	un-verified	inspection test	un- verified	5574

<u>1 450 13</u>									
	delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique metadata search and access services								
SDPS0120# A	The SDPS shall be capable of operating in a 24-hour a day, 7-day a week mode.	SDPS	operational	mission essential	test	un-verified	analysis test	un- verified	4206
SDPS0170# A	The SDPS shall accommodate growth in the instrument processing load and storage capacity without changes to the SDPS architecture or design.	SDPS	evolvable	mission essential	test	un-verified	analysis test	un- verified	4209
SMC- 2115#A	The LSM shall convey for site or element implementation, the managerial and operational directives regarding the allocation or upgrade of any elementis hardware and scientific and systems software.	CSMS	functional	mission essential	analysis	un-verified	demo analysis	un- verified	4235
SMC- 2505#A	The LSM shall update the system- wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.	CSMS	functional	mission critical	test	un-verified	demo test	un- verified	4273
SMC- 2605#A	The LSM shall support the site and element in implementing ESDIS Project policies and procedures received from the SMC covering the following areas, at a minimum: a. Element responsibility and authority b. Resource management c. Fault recovery d. Testing	CSMS	security	mission fulfillment	analysis	un-verified	demo analysis	un- verified	4282

e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security  SMC- 3345#A  SMC- assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of	
assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations	
products processed and delivered c. Quality testing and audits of element resource performance,	4301
SMC- 3370#A  For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation  For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation  For each performance parameter, the SMS functional mission critical  mission critical  mission critical  un-verified test analysis  un-verified  verified	4304
SMC- 3421#A  The SMC shall analyze user feedback information supporting the development of recommended remedial or enhancement actions.  CSMS functional mission essential un-verified essential un-verified essential un-verified essential un-verified un-verified essential un-verified ess	6087
SMC- The LSM shall perform CSMS security mission analysis un-verified inspection un-	4343

<u> 1 age 13</u>							
5345#A	compromise (e.g., virus or worm		critical		analysis	verified	
	penetration) risk analysis, and						
	detection.						